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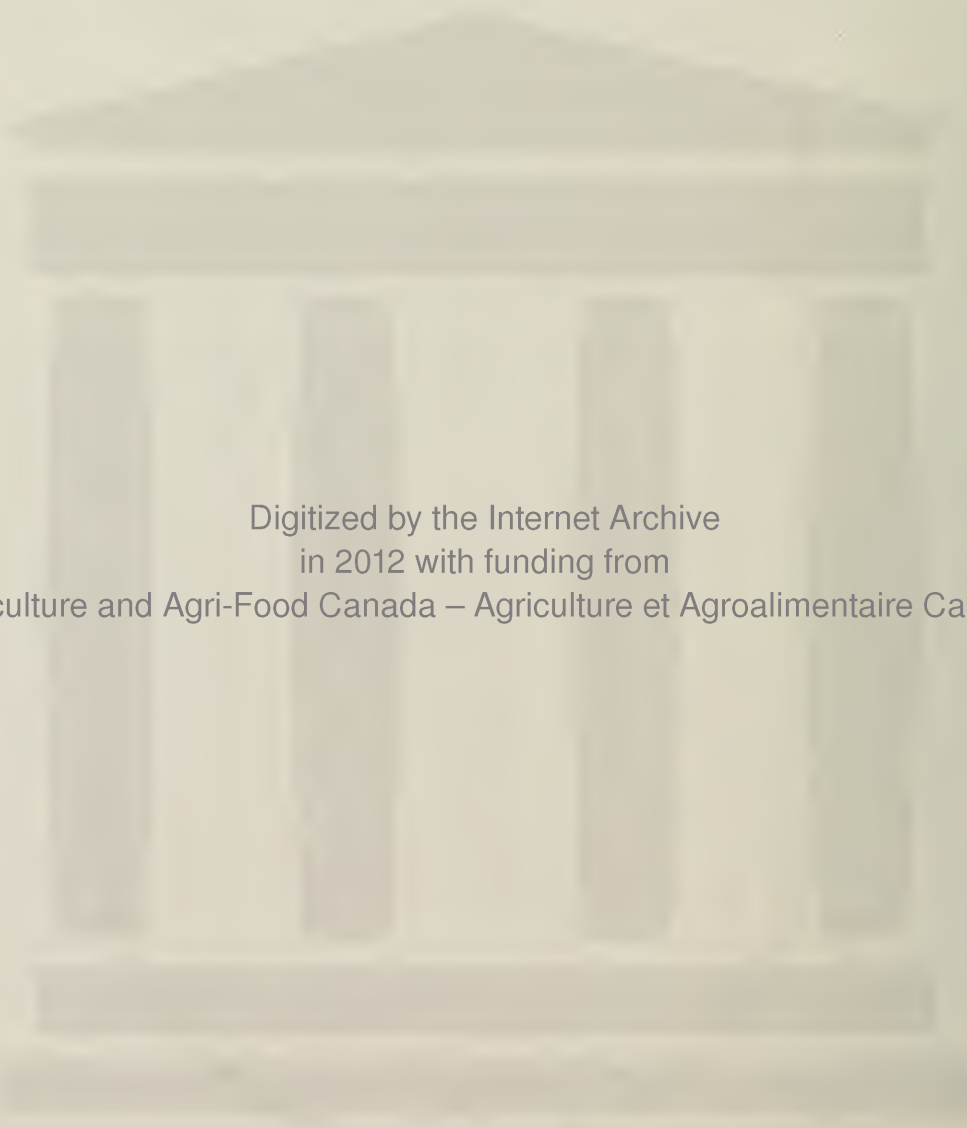


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Growing Fuchsias



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Growing Fuchsias

Flowers of striking colors and unique form, a long blooming season, easy culture, and ready response to training make the so-called common fuchsia one of the most popular and interesting container-grown flowering plants for the home gardener.

When grown indoors at suitable temperature and in proper soil, successful flowering depends mainly on light; therefore, fuchsias do best when they are in a glass or plastic house or a very well lighted sun-room.

They can be grown outdoors only when the temperature remains above freezing; therefore, in regions with a short growing season, plants for growing outside should be well established and they should have plenty of buds.

The scientific name for the common fuchsia is *Fuchsia hybrida*; *F. speciosa* is a name used formerly and still sometimes used today. Probable ancestors include *F. fulgens*, *F. corymbiflora*, and *F. magellanica*. *F. fulgens* is native to Mexico; the other two are indigenous to Peru. Another species, *F. magellanica*, is quite variable and it has contributed greatly to the spectacular fuchsia varieties that are now available. *F. magellanica*, and its hybrids, can be grown permanently outside in mild parts of British Columbia. They are good as specimen shrubs and for an informal hedge.

Growing Site

Suitable sites for common fuchsias outdoors are the same as those for tuberous begonias, for example, lathhouses, lightly shaded patios, heavily shaded greenhouses, northern exposures that have full sun only until 10 a.m., and locations where moderate shade is provided by trees. Fuchsias should not be grown in windy places, where temperatures are extreme, or in strong sunlight.

Uses

In catalogues and other publications fuchsias are usually listed according to their normal habit of growth, that is, upright or trailing plants. However, both types can be trained to suit a person's wish. Examples of trained fuchsias are shown in Figures 1 to 4.

The section on insects is by Mr. Tonks. Mr. Crossley and Mr. Arrowsmith wrote the other sections of this publication.



Figure 1. A fully developed 2-year-old tree, or standard, in full bloom.

Figure 2. Bush fuchsia.





Figure 3. A hanging basket in full bloom in July. The plants are from cuttings rooted in February.



Figure 4. Column fuchsia.

Starting Plants

Fuchsias are grown from cuttings rather than from seeds, because cuttings become plants exactly like the parent, whereas plants from seeds may be different.

About the middle of January take from storage overwintered plants that are 1 year old or older, cut back the branches in the manner shown in Figure 5, and place the plants in a greenhouse or bright room at 16–18°C, in full light.



Figure 5.
A 2-year-old specimen after
winter storage and spring
pruning.

If the plant is starting its third year or if the pot size is less than 20 cm, repot the plant in the following way. Loosen the root mass, then remove about half of the old soil and replace it with freshly prepared potting soil. (See the next section for the way to prepare the soil.) If repotting is not needed, water and fertilize the pruned plant in the manner described in the section on summer care.

By late February or early March, new shoots will be long enough for cuttings to be made from them. Take cuttings about 8 cm long from strong terminal shoots, and choose shoots that have three pairs of leaves. The best time to take cuttings, however, is in March or April, before the flower buds appear. Plants with flower buds make inferior cuttings, because vegetation is not so robust when a plant is about to flower.

Root the cuttings in a mixture of 3 parts sand, 1 part peat, and 1 part perlite or vermiculite.

Rooting hormones are not needed unless for varieties you know are hard or slow to root. For these varieties use preparations at the strengths recommended for softwood cuttings. A fungicide dust added to the rooting powder in the proportion 1:1 by volume will increase the effectiveness of the hormone.

Keep the air temperature between 16° and 18°C, and syringe the cuttings often to keep them turgid. They will root in about 3 weeks.

Potting Soil

Plant the rooted cuttings in 8 cm pots. For these cuttings, and for transplants of all ages, use the following freshly prepared growing mixture:

- 10 parts pasteurized garden loam
- 9 parts nursery grade sphagnum peat moss with up to
- 1 part coarse washed sand, depending on the clay content of the soil, and
- 1.2 kg of blood meal fertilizer to each cubic metre of growing mixture

This mixture contains enough plant food to sustain satisfactory growth until the final transplanting into containers in which the plants will flower.

Pasteurize the soil by steaming it for 35 minutes at 82°C, before adding the fertilizer. Small quantities may be pasteurized by holding moist, not wet, soil in a closed pan in an oven. You can buy pasteurized soil from garden shops.

To ensure good drainage, place 1 cm of pea-sized gravel in the bottom of each container.

Training

Training begins with actively growing rooted cuttings that have been transplanted into 8 cm pots.



Figure 6. Pinched (left) and unpinched rooted fuchsia cuttings ready for transplanting in 8 cm pots. The pinched cutting will be developed into a tub, basket, bush, or column specimen. The unpinched cutting will be used to form a tree or espalier.

BUSH

Remove the tip of the stem or shoot, and leave two or three pairs of leaves. This procedure is called pinching (see Figure 6); it forces the development of side shoots (Figure 7). Just as soon as the side shoots develop to the extent that two or three pairs of leaves can be left, pinch off each new tip. Pinch each new set of lateral shoots until late April. Discontinuing the pinching permits the development of flower buds.



Figure 7. A fuchsia plant 2 weeks after pinching and planting in an 8 cm pot. Note the development of lateral shoots.

HANGING BASKET

To make a hanging basket (Figure 8), punch three 1 cm holes in the bottom of a gallon container such as a tin can. Place the container in the basket, and surround it with moss. Fill the container with the soil mixture set down in the previous section "Potting Soil." In March, transplant three specimens, each similar to the one shown in Figure 7, into the container. Continue pinching until April.

TREE

To develop a tree, or standard, begin to train the plant early. Pinch only the side shoots as they develop. Leave the topmost one to form the trunk (Figure 9). When removing each lateral, leave the leaf attached to the trunk to sustain the plant. Continue to remove the side shoots until the tree has grown to the desired height. At this stage, allow three pairs of laterals to develop to form the head. Develop the head in the same way

as for training basket and bush types. When the head is well developed, remove the leaves along the trunk.

Figure 8. Starting a hanging basket.



Figure 9. Training a tree or standard. **Left:** This plant, in an 8 cm pot, had the lower laterals removed at an earlier date and now it requires further removal of later-forming side shoots. This process is continued until the approximate desired height has been attained. **Right:** Same plant after removal of laterals.

ESPALIER

An espalier is a plant trained to grow against a vertical structure. To make an espalier of a fuchsia, proceed as follows: remove all side shoots until the trunk is about 25 cm high, then retain the first pair of laterals. Leave the extension of each lateral. Train each extension as a main branch by tying it to a separate support. Pinch off the laterals that arise along these main branches. Develop the second and subsequent pairs of main branches in the same way as the first, leaving the desired spacing between paired branches.

COLUMN

Develop a trunk, but instead of removing the side shoots train them by pinching, as described in the sections on a hanging basket and a bush. Stop pinching when the plant has grown to the desired height and spread.

Summer Care

Keep the soil moist by watering once or twice a day. Too much or too little water quickly results in poor plant performance.

Remove old blossoms so that plant energy is directed toward the production of flowers rather than seeds. Old flowers of varieties like Jack Shahan, which drop off naturally, do not need this attention.

Stake and tie standard, espalier, and tall bush types when it becomes necessary.

Begin liquid feeding when the plants are well established, usually 5 to 6 weeks after the final transplanting. Apply liquid plant food at about 2-week intervals. Use high-analysis soluble fertilizers such as 23-21-17 or 20-20-20 at the rate recommended on the container. Leaf color is a good guide to fertilizer requirements. Pale leaves are usually a sign of inadequate nutrients, mainly insufficient nitrogen. Pale leaves are also caused by excessively wet soil and by too much sun. Nitrogen deficiency can be corrected either by increasing the frequency or concentration of the liquid fertilizer or, preferably, by applying a solution of 8 g of ammonium sulfate in a litre of water. Apply 250- 500 mL of the solution, depending on the size of the plant. After one application of the solution, revert to the original feeding program. To prevent root burning, always apply fertilizer solutions to moist soil.

Winter Care

In the fall, before frost causes damage, transfer the plants to winter quarters such as a cool basement, frost-free garage, greenhouse, or pit. During the winter, water them only enough to keep the roots and tops from drying out. Pruning may be done before or after storage. If storage space is limited, prune before you put the plants away (see Figure 6).

Bud Drop

Bud drop may be caused by extremes of soil moisture, dry air, and low light intensity.

Insect Pests

Few serious insect pests attack fuchsias, but uncontrolled infestations may cause severe damage within a short time. Inspect your plants frequently. Watch for early signs of pest activity, and treat promptly and thoroughly.

Insecticides suitable for use in home gardens and greenhouses are usually formulated as wettable powders or emulsifiable concentrates to be added to water and sprayed on the plants. Wettable powders are less likely to damage sensitive varieties, but they may leave unsightly residues. Some materials are prepared as dusts or granules for treating plants or soil, and others are obtainable in small aerosol bombs for use on houseplants. Before using any formulation, make sure it is approved for use on plants. Use the recommended dosage rates, and follow all safety precautions listed on the label. When mixing and applying insecticides, wear rubber gloves, particularly if you are dipping plants in insecticide solutions. Very few pesticides are completely harmless.

Because pest control recommendations are subject to change at short notice, consult your local agricultural authorities for the most recent approved control procedures.

APHIDS

Aphids are small, soft-bodied, pear-shaped, and usually slow-moving insects that suck the juice from leaves and stems. Leaves become curled and distorted, and they may drop off. When aphids and many other sucking insects are feeding, they excrete sticky, sugary honeydew, which covers the plants. A black sooty fungus grows in the honeydew and makes the infested plants even more unsightly. The sooty mold remains on the plants for a long time after the insect infestation has been controlled.

MEALYBUGS

Mealybugs are small, oval, soft, scalelike insects covered with white, powdery, filamentous wax. They suck juice from the plants and excrete large quantities of honeydew.

CYCLAMEN MITE

Cyclamen mites are not very common on fuchsia. They are too small to be seen with the unaided eye, but, when infested, plants are stunted, flowers are deformed, and rusty patches appear on leaves and stems.

TWO-SPOTTED SPIDER MITE

Two-spotted spider mites, found in their fine webbing on the undersides of leaves, look like very small yellowish, green, reddish, or black specks. Infested leaves are bronzed or speckled grayish white, and they may fall off.

SCALES

Scale insects are covered with a protective shell of wax. Armored scales have hard shells that are separate from the insect body inside. They lose their legs and antennae after a brief crawling stage, and then remain in one spot for the rest of their lives. Many of these scales inject an injurious toxin into plants as they feed. Soft scales have a waxy or thickened covering on their bodies, but it is not separate. These scales keep their legs, and they move around very sluggishly. They excrete large quantities of honeydew as they feed.

THRIPS

These small, slender, scarcely visible insects scar foliage with their piercing, rasping mouthparts. Infested plants look silvery or bleached, and leaves may drop off.

BLACK VINE WEEVIL

The adults of the black vine weevil are black or brownish, about 10 mm long, and they have a short snout. They feed at night, leaving small ragged notches in leaf margins. The small, whitish, curved larvae do the most damage by feeding on roots and girdling the crowns. Infested plants become severely weakened and they may die.

WHITEFLIES

Whiteflies are one of the most serious pests of fuchsia. Adult whiteflies have two pairs of wings covered with white waxy powder. They look like very small white moths, which fly out in clouds when infested bushes are disturbed. The immature forms resemble very small pale-yellow oval scales clustered on the undersides of leaves. Infested plants become spotted with honeydew, and leaves may fall off.

Varieties of Fuchsias

The following are a few varieties recommended for free-flowering habit, vigor, and ease of culture. Those marked with an asterisk bloom continuously; others bloom recurrently.

Angel's Flight	— pink and white, double, small foliage, good for baskets
* Dusky Rose	— rose and blue, double, suitable for any purpose
Fluorescent	— lavender blue, white sepals, double, best for pots and tubs
* Flying Saucer	— lavender pink, single, suitable for any purpose
Golden Marinka	— magenta red, double, noted for its variegated foliage
* Indian Maid	— deep purple and red, double, good for any purpose
* Jack Shahan	— rose pink, single, good for any purpose
Kathy Louise	— rose pink, double, best in baskets
La Neige	— pure white, double, one of the best whites, good for any purpose
* Lolita	— blue and pink, double, natural trailing variety, for baskets only
* Lynn Ellen	— rose pink and blue, double, small leaves, good for any purpose
* Mama Bleuss	— blue and red, double, best in baskets
* Mrs. Victor Reiter	— red and white, single, best as bush or standard
* Mrs. Rundle	— orange and pink, single, best in baskets
Pink Galore	— pink, double, best in baskets
Ruffles	— deep violet marbled pink, double, good for all purposes
Sophisticated Lady	— white with pink flush, pink sepals, double, good for any purpose
* Streamliner	— red, double, natural trailing variety, for baskets only
* Swingtime	— red and white, double, best in this color combination, good for any purpose
* Voodoo	— dark purple and red, double, suitable for all purposes except baskets



CONVERSION FACTORS

Metric units	Approximate conversion factors	Results in:
LINEAR		
millimetre (mm)	x 0.04	inch
centimetre (cm)	x 0.39	inch
metre (m)	x 3.28	feet
kilometre (km)	x 0.62	mile
AREA		
square centimetre (cm ²)	x 0.15	square inch
square metre (m ²)	x 1.2	square yard
square kilometre (km ²)	x 0.39	square mile
hectare (ha)	x 2.5	acres
VOLUME		
cubic centimetre (cm ³)	x 0.06	cubic inch
cubic metre (m ³)	x 35.31	cubic feet
	x 1.31	cubic yard
CAPACITY		
litre (L)	x 0.035	cubic feet
hectolitre (hL)	x 22	gallons
	x 2.5	bushels
WEIGHT		
gram (g)	x 0.04	oz avdp
kilogram (kg)	x 2.2	lb avdp
tonne (t)	x 1.1	short ton
AGRICULTURAL		
litres per hectare (L/ha)	x 0.089	gallons per acre
	x 0.357	quarts per acre
	x 0.71	pints per acre
millilitres per hectare (mL/ha)	x 0.014	fl. oz per acre
tonnes per hectare (t/ha)	x 0.45	tons per acre
kilograms per hectare (kg/ha)	x 0.89	lb per acre
grams per hectare (g/ha)	x 0.014	oz avdp per acre
plants per hectare (plants/ha)	x 0.405	plants per acre

